

IN THE CLAIMS:

Claims 1 - 110 (Cancelled).

111. (New) A composition comprising a therapeutically effective amount of at least one aldobionic acid selected from the group consisting of cellobionic acid, gentiobionic acid, isolactobionic acid, isomaltobionic acid, kojibionic acid, laminarabionic acid, maltobionic acid, melibionic acid, nigerobionic acid, rutinobionic acid, and sophorobionic acid, and as free acid, ester, salt, lactone, stereoisomeric, non-stereoisomeric, saturated or unsaturated, straight or branched chain, or cyclic forms thereof.
112. (New) The composition of claim 111, wherein said aldobionic acid is maltobionic acid.
113. (New) The composition of claim 111, further comprising a topically active agent.
114. (New) The composition of claim 113, wherein said topically active agent is selected from the group consisting of agents that improve or eradicate age spots, keratoses and wrinkles; local analgesics and anesthetics; antiacne agents; antieczema agents; wound healing agents; antibacterials; antiyeast agents; antifungal agents; antiviral agents; antidandruff agents; antidermatitis agents; antihistamine agents; antipruritic agents; antiemetics; antimotion sickness agents; antiinflammatory agents; antihyperkeratotic agents; antiperspirants; antipsoriatic agents; antiseborrheic agents; hair conditioners and hair treatment agents; antiaging and antiwrinkle agents; sunblock and sunscreen agents; skin lightening agents; depigmenting agents; vitamins; corticosteroids; tanning agents; humectants; hormones; amino acids; dipeptides; tripeptides; oligopeptides; polypeptides; retinoids; topical cardiovascular agents; hydroxyacids, ketoacids and related compounds;

phenyl alpha acyloxyalkanoic acids and derivatives thereof; and N-acetyl-aldosamines, N-acetylamino acids and related N-acetyl compounds.

115. (New) The composition of claim 113, wherein said topically active agent is selected from the group consisting of aclovate, acyclovir, acetylsalicylic acid, adapalene, albuterol, aluminum acetate, aluminum chloride, aluminum hydroxide, aluminum chlorohydroxide, amantadine, aminacrine, p-aminobenzoic acid, γ -aminobutanoic acid, aminocaproic acid, aminosalicylic acid, amitriptyline, anserine, anthralin, ascorbic acid, ascorbyl palmitate, atropine, azelaic acid, bacitracin, bemegride, beclomethasone dipropionate, benzocaine, benzophenone, benzoyl peroxide, betamethasone dipropionate, betamethasone valerate, brompheniramine, bupivacaine, butoconazole, calcipotriene, camphor, capsaicin, carbamide peroxide, camosine, chitosan, chlorhexidine, chloroxylenol, chlorpheniramine, ciclopirox, clemastine, clindamycin, clioquinol, clobetasol propionate, clotrimazole, coal tar, cromolyn, crotamiton, cycloserine, dehydroepiandrosterone, desoximetasone, dexamethasone, diphenhydramine, doxepin, doxylamine, dyclonine, econazole, erythromycin, estradiol, ethinyl estradiol, fluocinocide, fluocinolone acetonide, 5-fluorouracil, glutathione, griseofulvin, guaifenesin, haloprogin, hexyiresorcinol, homocarnosine, homosalate, hydrocortisone, hydrocortisone 21-acetate, hydrocortisone 17-valerate, hydrocortisone 17-butyrate, hydrogen peroxide, hydroquinone, hydroquinone monoether, hydroxyzine, ibuprofen, ichthammol, imiquimod, indomethacin, ketoconazole, ketoprofen, kojic acid, lidocaine, meclizine, meclocycline, menthol, mepivacaine, methyl nicotinate, methyl salicylate, metronidazole, miconazole, minocycline, minoxidil, monobenzene, mupirocin, naftifine, naproxen, neomycin, nystatin, octyl methoxycinnamate, octyl salicylate, ophidine, ornithine, oxybenzone, oxiconazole, oxymetazoline, padimate O, permethrin, pheniramine, phenol, phenylephrine, phenylpropanolamine,

piperonyl butoxide, podophyllin, podofilox, povidone iodine, polymyxins, pramoxine, prilocaine, procaine, promethazine propionate, propranolol, pseudoephedrine, pyrethrin, pyrillamine, resorcinol, retinal, 13-cis retinoic acid, retinoic acid, retinol, retinyl acetate, retinyl palmilate, salicylamide, salicylic acid, selenium sulfide, shale tar, sulconazole, sulfur, sulfadiazine, tazarotene, terbinafine, terconazole, tetracaine, tetracycline, tetrahydrozoline, thymol, tioconazole, tolnaftate, triamcinolone diacetate, triamcinolone acetonide, triamcinolone hexacetonide, triclosan, triprolidine, undecylenic acid, urea, vitamin E acetate, wood tar, zinc pyrithione, glycolic acid, lactic acid, methylactic acid, 4-hydroxy-mandelic acid, mandelic acid, gluconolactone, N-acetyl-glucosamine, N-acetyl-proline, phenyl 2-acetoxyethanoic acid and diphenyl 2-acetoxyethanoic acid.

116. (New) The composition of claim 111, further comprising an inorganic or organic alkali or amphoteric substance.
117. (New) The composition of claim 116, wherein said inorganic alkali is selected from the group consisting of ammonium hydroxide, ammonium phosphate, ammonium carbonate, ammonium bicarbonate, sodium hydroxide, sodium carbonate, sodium bicarbonate, sodium acetate, sodium phosphate, and alkalis formed from potassium, calcium, magnesium, strontium, aluminum, zinc, and lithium.
118. (New) The composition of claim 116, wherein said organic alkali is selected from the group consisting of organic amines, hydroxylamines, imines, guanidines, amine oxides, alkanolamines, alkoxyated amines, alkylamido alkylamines, polyamines, amino acid esters, amino acid amides, aminosaccharides, aminoalditols, aminocyclitols, fattyamines, and imidazolines.

119. (New) The composition of claim 118, wherein said organic alkali is selected from the group consisting of diethanolamine, triethanolamine, isopropanolamine, diisopropanolamine, triisopropanolamine, aminobutanol, aminoethyl propanediol, aminomethyl propanol, aminomethyl propanediol, isopropylamine, dimethylaminoethanol, diethylaminoethanol, methylethanolamine, diisopropylamine, dipropylenetriamine, glucamine, N-methylglucamine, morpholine, tromethamine, cocamines, soyamines, oleamines, stearamines, quaterniums, creatinine, glycine ethyl ester, arginine ethyl ester, lysine methyl ester, proline ethyl ester, citrulline benzyl ester, glycinamide, argininamide, prolinamide, lysinamide, glucosamines and glucosylamines, other glycosamines and glycosylamines, aminoinositols, chitosan, stearamidoethyl diethylamine, stearamidopropyl dimethylamine, stearamidoethyl diethanolamine, and quaternary ammonium hydroxide.
120. (New) The composition of claim 116, wherein said amphoteric substance is selected from the group consisting of amino acids, peptides, polypeptides, proteins and related compounds.
121. (New) The composition of claim 116, wherein said amphoteric substance is selected from the group consisting of glycine, arginine, lysine, cysteine, proline, glutamine, histidine, asparagine, tyrosine, ornithine, citrulline, creatine, creatinine, and tryptophan.
122. (New) A method for the general care, treatment, or prevention of cosmetic conditions or dermatological disorders comprising topically applying a composition comprising a therapeutically effective amount of at least one aldobionic acid selected from the group consisting cellobionic acid, gentiobionic acid, isolactobionic acid, isomaltobionic acid, kojibionic acid, laminarabionic acid, maltobionic acid, melibionic acid, nigerobionic acid, rutinobionic acid, and sophorobionic acid, and as free acid, ester, salt, lactone,

stereoisomeric, non-stereoisomeric, saturated or unsaturated, straight or branched chain, or cyclic forms thereof.

123. (New) The method of claim 122, wherein said aldobionic acid is maltobionic acid.
124. (New) The method of claim 122, wherein said cosmetic conditions or dermatological disorders are selected from the group consisting of disturbed keratinization, defective syntheses of dermal components, and changes associated with aging of skin, nail and hair; and those indications which include dryness or looseness of skin, nail and hair; xerosis; ichthyosis; palmar and plantar hyperkeratoses; uneven and rough surface of skin, nail and hair; dandruff; Darier's disease; lichen simplex chronicus; keratoses; acne; rosacea; pseudofolliculitis barbae; eczema; psoriasis; itchy scalp and skin; pruritus; warts; herpes; age spots; lentigines; melasmas; blemished skin; hyperkeratoses; hyperpigmented skin; uneven skin tone; redness; abnormal or diminished syntheses of collagen, glycosaminoglycans, proteoglycans and elastin as well as diminished levels of such components in the dermis; stretch marks; skin lines; fine lines; wrinkles; thinning of skin, nail plate and hair, skin thickening due to elastosis of photoaging, loss or reduction of skin, nail and hair resiliency, elasticity and recoilability; lack of skin, nail and hair lubricants and luster; dull and older-looking skin, nail and hair; and fragility and splitting of nail and hair.
125. (New) The method of claim 122, wherein said composition further comprises a topically active agent.
126. (New) The method of claim 125, wherein said topically active agent is selected from the group consisting of agents that improve or eradicate age spots, keratoses and wrinkles; local analgesics and anesthetics; antiacne

agents; antibacterials; antiyeast agents; antifungal agents; antiviral agents; antidandruff agents; antidermatitis agents; antihistamine agents; antipruritic agents; antiemetics; antmotion sickness agents; antiinflammatory agents; antihyperkeratotic agents; antiperspirants; antipsoriatic agents; antirosacea agents; antieczema agents; antiseborrheic agents; hair conditioners and hair treatment agents; antiaging and antiwrinkle agents; sunblock and sunscreen agents; skin lightening agents; depigmenting agents; vitamins; corticosteroids; tanning agents; humectants; hormones; amino acids; dipeptides; tripeptides; oligopeptides; polypeptides; retinoids; topical cardiovascular agents; hydroxyacids, ketoacids and related compounds; phenyl alpha acyloxyalkanoic acids and derivatives thereof; and N-acetylalidosamines, N-acetylalino acids and related N-acetyl compounds.

127. (New) The method of claim 125, wherein said topically active agent is selected from the group consisting of aclovate, acyclovir, acetylsalicylic acid, adapalene, albuterol, aluminum acetate, aluminum chloride, aluminum hydroxide, aluminum chlorohydroxide, amantadine, aminacrine, p-aminobenzoic acid, γ -aminobutanoic acid, aminocaproic acid, aminosalicylic acid, amitriptyline, anserine, anthralin, ascorbic acid, ascoryl palimate, atropine, azelaic acid, bacitracin, bemegride, beclomethasone dipropionate, benzocaine, benzophenone, benzoyl peroxide, betamethasone dipropionate, betamethasone valerate, brompheniramine, bupivacaine, butoconazole, calcipotriene, camphor, capsaicin, carbamide peroxide, carnosine, chitosan, chlorhexidine, chloroxylenol, chlorpheniramine, ciclopirox, clemastine, clindamycin, clioquinol, clobetasol propionate, clotrimazole, coal tar, cromolyn, crotamiton, cycloserine, dehydroepiandrosterone, desoximetasone, dexamethasone, diphenhydramine, doxypin, doxylamine, dyclonine, econazole, erythromycin, estradiol, ethinyl estradiol, fluocinonide,

fluocinolone acetonide, 5-fluorouracil, glutathione, griseofulvin, guaifenesin, haloprogin, hexylresorcinol, homocarnosine, homosalate, hydrocortisone, hydrocortisone 21-acetate, hydrocortisone 17-valerate, hydrocortisone 17-butyrate, hydrogen peroxide, hydroquinone, hydroquinone monoether, hydroxyzine, ibuprofen, ichthammol, imiquimod, indomethacin, ketoconazole, ketoprofen, kojic acid, lidocaine, meclizine, meclocycline, menthol, mepivacaine, methyl nicotinate, methyl salicylate, metronidazole, miconazole, minocycline, minoxidil, monobenzene, mupirocin, naftifine, naproxen, neomycin, nystatin, octyl methoxycinnamate, octyl salicylate, ophidine, ornithine, oxybenzone, oxiconazole, oxymetazoline, padimate O, permethrin, pheniramine, phenol, phenylephrine, phenylpropanolamine, piperonyl butoxide, podophyllin, podofilox, povidone iodine, polymyxins, pramoxine, prilocaine, procaine, promethazine propionate, propranolol, pseudoephedrine, pyrethrin, pyrillamine, resorcinol, retinal, 13-cis retinoic acid, retinoic acid, retinol, retinyl acetate, retinyl palmitate, salicylamide, salicylic acid, selenium sulfide, shale tar, sulconazole, sulfur, sulfadiazine, tazarotene, terbinafine, terconazole, tetracaine, tetracycline, tetrahydrozoline, thymol, tioconazole, tolnaftate, triamcinolone diacetate, triamcinolone acetonide, triamcinolone hexacetonide, triclosan, triprolidine, undecylenic acid, urea, vitamin E acetate, wood tar, zinc pyrithione, glycolic acid, lactic acid, methylactic acid, 4-hydroxy-mandelic acid, mandelic acid, gluconolactone, N-acetyl-glucosamine, N-acetyl-proline, phenyl 2-acetoxyethanoic acid and diphenyl 2-acetoxyethanoic acid.

128. (New) The method of claim 122, wherein said composition further comprises an inorganic or organic alkali, or amphoteric substance.
129. (New) The method of claim 128, wherein said inorganic alkali is selected from the group consisting of ammonium hydroxide, ammonium phosphate,

ammonium carbonate, ammonium bicarbonate, sodium hydroxide, sodium carbonate, sodium bicarbonate, sodium acetate, sodium phosphate, and alkalis formed from potassium, calcium, magnesium, strontium, aluminum, zinc, and lithium.

130. (New) The method of claim 128, wherein said organic alkali is selected from the group consisting of organic amines, hydroxylamines, imines, guanidines, amine oxides, alkanolamines, alkoxylated amines, alkylamido alkylamines, polyamines, amino acid esters, amino acid amides, aminosaccharides, aminoalditols, aminocyclitols, fattyamines, and imidazolines.
131. (New) The method of claim 128, wherein said organic alkali is selected from the group consisting of diethanolamine, triethanolamine, isopropanolamine, diisopropanolamine, triisopropanolamine, aminobutanol, aminoethyl propanediol, aminomethyl propanol, aminomethyl propanediol, isopropylamine, dimethylaminoethanol, diethylaminoethanol, methylethanolamine, diisopropylamine, dipropylenetriamine, glucamine, N-methylglucamine, morpholine, tromethamine, cocamines, soyamines, oleamines, stearamines, quaterniums, creatinine, glycine ethyl ester, arginine ethyl ester, lysine methyl ester, proline ethyl ester, citrulline benzyl ester, glycinamide, argininamide, prolinamide, lysinamide, glucosamines and glucosylamines, other glycosamines and glycosylamines, aminoinositols, chitosan, stearamidoethyl diethylamine, stearamidopropyl dimethylamine, stearamidoethyl diethanolamine, and quaternary ammonium hydroxide.
132. (New) The method of claim 128, wherein said amphoteric substance is selected from the group consisting of amino acids, peptides, polypeptides, proteins and related compounds.

133. (New) The method of claim 128, wherein said amphoteric substance is selected from the group consisting of glycine, arginine, lysine, cysteine, proline, glutamine, histidine, asparagine, tyrosine, ornithine, citrulline, creatine, creatinine, and tryptophan.
134. (New) A method for the general care, treatment, or prevention of diseases or conditions of the oral, vaginal or anal mucosa or for treating skin wounds, comprising topically applying a composition comprising a therapeutically effective amount of at least one aldobionic acid selected from the group consisting of cellobionic acid, gentiobionic acid, isolactobionic acid, , isomaltobionic acid, kojibionic acid, lactobionic acid, laminarabionic acid, maltobionic acid, melibionic acid, nigerobionic acid, rutinobionic acid, and sophorobionic acid, and as free acid, ester, salt, lactone, stereoisomeric, non-stereoisomeric, saturated or unsaturated, straight or branched chain, or cyclic forms thereof.
135. (New) The method of claim 134, wherein said aldobionic acid is lactobionic acid.
136. (New) The method of claim 134, wherein said aldobionic acid is maltobionic acid.
137. (New) The method of claim 134, wherein said skin wounds are selected from the group consisting of skin cuts, tears, lacerations, burns, and punctures.
138. (New) The method of claim 134, wherein said composition further comprises a topically active agent.
139. (New) The method of claim 138, wherein said topically active agent is selected from the group consisting of local analgesics and anesthetics;

antibacterials; antiyeast agents; antifungal agents; antiviral agents;
antidermatitis agents; antihistamine agents; antipruritic agents;
antiinflammatory agents; vitamins; corticosteroids; hormones; retinoids;
antioxidants; N-acetyl-aldosamines, N-acetyl-amino acids and related N-acetyl
compounds.

140. (New) The method of claim 138, wherein said topically active agent is selected from the group consisting of benzocaine, clotrimazole, ketoconazole, miconazole, griseofulvin, econazole, metronidazole, hydroxyzine, diphenhydramine, phenylephrine, pramoxine, lidocaine, procaine, mepivacaine, erythromycin, tetracycline, clindamycin, meclocycline, minocycline, naproxen, ibuprofen, theophylline, cromolyn, albuterol, retinol, retinyl acetate, retinyl palmitate, retinal, retinoic acid, 13-cis retinoic acid, hydrocortisone, hydrocortisone 21-acetate, hydrocortisone 17-valerate, hydrocortisone 17-butyrate, betamethasone valerate, betamethasone dipropionate, triamcinolone acetonide, fluocinonide, clobetasol, propionate, crotamiton, propranolol, promethazine, salicylic acid, vitamin E, vitamin E acetate, mandelic acid, gluconolactone, N-acetyl-glucosamine, N-acetyl-proline.

141. (New) A method for the general care, treatment, or prevention of cosmetic conditions or dermatological disorders comprising topically applying a composition comprising a therapeutically effective amount of lactobionic acid as free acid, ester, salt, partial salt, lactone, stereoisomeric, non-stereoisomeric, saturated or unsaturated, straight or branched chain, or cyclic form thereof, wherein the cosmetic condition or dermatological disorder is selected from the group of indications consisting of dryness or looseness of skin, nail and hair; xerosis; ichthyosis; palmar and plantar hyperkeratoses; uneven and rough surface of skin, nail and hair; dandruff; Darier's disease;

lichen simplex chronicus; keratoses; acne; rosacea; pseudofolliculitis barbae; eczema; psoriasis; pruritus; warts; herpes, hyperkeratoses; stretch marks; thinning of nail plate and hair; fragility and splitting of nail and hair; wound-healing and treatment of skin wounds; general care as well as treatment and prevention of diseases and conditions of oral, gum, vaginal and anal mucosa.

142. (New) The method of claim 141, wherein the cosmetic condition or dermatological disorder is selected from the group of indications consisting of dry skin, acne, rosacea, eczema, and pseudofolliculitis barbae.
143. (New) The method of claim 141, wherein the composition further comprises a topically active agent selected from the group consisting of local analgesics and anesthetics; antiyeast agents; antifungal agents; antiviral agents; antidandruff agents; antidermatitis agents; antihistamine agents; antipruritic agents; antiemetics; antimotion sickness agents; antiinflammatory agents; antihyperkeratotic agents; antiperspirants; antipsoriatic agents; antiseborrheic agents; vitamins; corticosteroids; tanning agents; hormones; amino acids; dipeptides; tripeptides; oligopeptides; polypeptides; retinoids; wound healing agents; oral, vaginal and anal care or treatment agents; and gum disease treatment or care agents.
144. (New) The method of claim 141, wherein the composition further comprises a topically active agent is selected from the group consisting of aclovate, acyclovir, adapalene, albuterol, aluminum acetate, aluminum chloride, aluminum hydroxide, aluminum chlorohydroxide, amantadine, aminacrine, γ -aminobutanoic acid, aminocaproic acid, amitriptyline, anserine, anthralin, ascorbic acid, ascoryl palmitate, atropine, azelaic acid, bacitracin, bemegride, beclomethasone dipropionate, benzocaine, betamethasone dipropionate, betamethasone valerate, brompheniramine, bupivacaine, butoconazole, calcipotriene, camphor, capsaicin, carbamide peroxide,

carnosine, chitosan, chlorhexidine, chloroxylenol, chlorpheniramine, ciclopirox, clemastine, clioquinol, clobetasol propionate, clotrimazole, coal tar, cromolyn, crotamiton, cycloserine, dehydroepiandrosterone, desoximetasone, dexamethasone, diphenhydramine, doxypin, doxylamine, dyclonine, econazole, estradiol, ethinyl estradiol, fluocinonide, fluocinolone acetonide, 5-fluorouracil, glutathione, griseofulvin, guaifenesin, haloprogin, hexylresorcinol, homocarnosine, hydrocortisone, hydrocortisone 21-acetate, hydrocortisone 17-valerate, hydrocortisone 17-butyrate, hydrogen peroxide, hydroxyzine, ibuprofen, ichthammol, imiquimod, indomethacin, ketoconazole, ketoprofen, lidocaine, meclizine, menthol, mepivacaine, methyl nicotinate, miconazole, minocycline, minoxidil, mupirocin, naftifine, naproxen, neomycin, nystatin, ophidine, ornithine, oxiconazole, oxymetazoline, permethrin, pheniramine, phenol, phenylephrine, phenylpropanolamine, piperonyl butoxide, podophyllin, podofilox, povidone iodine, polymyxins, pramoxine, prilocaine, procaine, promethazine propionate, propranolol, pseudoephedrine, pyrethrin, pyrillamine, resorcinol, retinol, retinyl acetate, retinyl palmitate, salicylamide, selenium sulfide, shale tar, sulconazole, sulfur, sulfadiazine, tazarotene, terbinafine, terconazole, tetracaine, tetrahydrozoline, thymol, tioconazole, tolnaftate, triamcinolone diacetate, triamcinolone acetonide, triamcinolone hexacetonide, triclosan, triprolidine, undecylenic acid, urea, vitamin E acetate, wood tar, and zinc pyrithione.

145. (New) The method of claim 141, wherein the general care or treatment is for prevention and/or treatment against stinging or irritations of skin caused by chemicals, procedures, chemical peels, or other means.
146. (New) A method of forming a gel matrix on the skin, hair, nail or mucosa for the purpose of protection and other attributes comprising topically

applying a composition comprising at least one aldobionic acid selected from the group consisting of cellobionic acid, gentiobionic acid, isolactobionic acid, isomaltobionic acid, kojibionic acid, lactobionic acid, laminarabionic acid, maltobionic acid, melibionic acid, nigerobionic acid, rutinobionic acid, and sophorobionic acid, and as free acid, ester, salt, lactone, stereoisomeric, non-stereoisomeric, saturated or unsaturated, straight or branched chain, or cyclic forms thereof; wherein a gel matrix is formed on the skin, hair, nail or mucosa.

147. (New) The method of claim 146, wherein said aldobionic acid is lactobionic acid.
148. (New) The method of claim 146, wherein said aldobionic acid is maltobionic acid.
149. (New) An antioxidant composition comprising a therapeutically effective amount of at least one aldobionic acid selected from the group consisting of cellobionic acid, gentiobionic acid, isolactobionic acid, isomaltobionic acid, kojibionic acid, lactobionic acid, laminarabionic acid, maltobionic acid, melibionic acid, nigerobionic acid, rutinobionic acid, and sophorobionic acid, as free acid, ester, salt, lactone, stereoisomeric, non-stereoisomeric, saturated or unsaturated, straight or branched chain, or cyclic forms thereof.
150. (New) The antioxidant composition of claim 149, wherein said aldobionic acid is lactobionic acid.
151. (New) The antioxidant composition of claim 149, wherein said aldobionic acid is maltobionic acid.

152. (New) The antioxidant composition of claim 149, wherein the antioxidant composition is used for the prevention and/or treatment against damage from radiation, ionizing radiation, free radicals, laser, or other oxidative damages to the skin, hair, and nails.
153. (New) The antioxidant composition of claim 152, wherein wherein said aldobionic acid is lactobionic acid.
154. (New) The antioxidant composition of claim 152, wherein said aldobionic acid is maltobionic acid.
155. (New) A method for the general care of skin comprising topically applying a composition comprising a therapeutically effective amount of lactobionic acid, as free acid, ester, salt, partial salt, lactone, saturated or unsaturated, stereoisomeric or non-stereoisomeric, straight or branched chain, or cyclic form thereof, wherein the general care improves skin texture and pores, flakiness and redness; makes skin soft, smooth, fresh, balanced, visibly clear, even-toned and brighter; or increases skin fullness and plumpness.
156. (New) A method for the general care of skin comprising topically applying a composition comprising a therapeutically effective amount of maltobionic acid, as free acid, ester, salt, partial salt, lactone, saturated or unsaturated, stereoisomeric or non-stereoisomeric, straight or branched chain, or cyclic form thereof, wherein the general care improves skin texture and pores, flakiness and redness; makes skin soft, smooth, fresh, balanced, visibly clear, even-toned and brighter; or increases skin fullness and plumpness.

157. (New) A method for the preventative care or treatment of skin comprising topically applying a composition comprising a therapeutically effective amount of lactobionic acid, as free acid, ester, salt, partial salt, lactone, saturated or unsaturated, stereoisomeric or non-stereoisomeric, straight or branched chain, or cyclic form thereof, wherein the preventive care or treatment is for damages caused by laser treatment or procedure, electromagnetic radiation, or ionizing radiation such as alpha rays, beta rays, X-rays, and gamma rays.
158. (New) A method for the preventative care or treatment of skin comprising topically applying a composition comprising a therapeutically effective amount of maltobionic acid, as free acid, ester, salt, partial salt, lactone, saturated or unsaturated, stereoisomeric or non-stereoisomeric, straight or branched chain, or cyclic form thereof, wherein the preventive care or treatment is for damages caused by laser treatment or procedure, electromagnetic radiation, or ionizing radiation such as alpha rays, beta rays, X-rays, and gamma rays.
159. (New) A topical cosmetic composition comprising lactobionic acid or maltobionic acid, and N-acetyl-glucosamine, present as free acid, ester, salt, partial salt, lactone, saturated or unsaturated, stereoisomeric or non-stereoisomeric, straight or branched chain or cyclic form thereof.
160. (New) A topical cosmetic composition comprising maltobionic acid and polyhydroxy acids selected from the group consisting of ribonolactone, gluconolactone, galactonolactone, glucoheptonolactone, glucuronolactone, galacturonolactone, glucarolactone and galactarolactone, wherein the maltobionic acids and polyhydroxy acids may be present as free acid, ester, salt, partial salt, lactone, saturated or unsaturated, stereoisomeric or non-stereoisomeric, straight or branched chain or cyclic form thereof.

161. (New) A topical cosmetic composition comprising maltobionic acid and ascorbic acid present as free acid, ester, salt, partial salt, lactone, saturated or unsaturated, stereoisomeric or non-stereoisomeric, straight or branched chain or cyclic form thereof.
162. (New) The method of claim 122, wherein the general care is for prevention and/or treatment against stinging or irritations of skin caused by chemicals, procedures or other means.